

The RRC regulates waste associated with

- Oil and Gas Wells
- Pipelines: (Oil, Gas, LNG)
- Natural Gas Processing Plants
- Salt Dome Cavern Storage
- Bulk Storage of Crude Oil
- RRC Commercial Disposal Facilities
- Coal Mining, Uranium Exploration, and Abandoned Mines



RRC/TCEQ Jurisdiction

- Memorandum of Understanding between RRC and TCEQ (16TAC3.30) – aka Statewide Rule 30
- RRC/TCEQ work cooperatively on cleanups that may involve waste from both industrial and O&G sources.



RRC Jurisdiction

- Oil and Gas operator(s) who cause or contribute to contamination are responsible for cleanup at RRC regulated sites.
- RRC does not hold innocent landowners responsible for cleanup.



www.rrc.state.tx.us

The screenshot shows the Railroad Commission of Texas website in Microsoft Internet Explorer. The address bar displays <http://www.rrc.state.tx.us/>. The website header includes the RRC logo and navigation links: News, Meetings, Jobs, Rules, FAQs, Links, Search, and Contact. A search bar is also present.

The main content area is divided into several sections:

- What's New @ the RRC?**
 - Oil and Gas Seminar - May 3-4, 2006 - Odessa
 - RRC Natural Gas Competition Study
 - Natural Gas Complaints
 - How Are We Doing?
- COMMISSIONERS**
 - Elisabeth A. Jones, Michael L. Williams, Victor G. Carrillo
- ABOUT THE RRC**
 - Mission Statement, History, Agency Organization, Sunset Review, Service Evaluation Survey
- ELECTRONIC FILING**
 - E-File (EDI)-Oil & Gas, E-File (EDI)-Gas Services, RRC Online System (Drilling Permits Application (IV-1) - Production Form PR)
- INTERACTIVE DATA**
 - Production Data Query (PDO), Oil & Gas Field Information, Well Records, EDHS, Gas Tariff Query System, Production Reports Query (PR), Drilling Permit Query (IV-1), Public GIS Map Viewer for Oil, Gas, and Pipeline Data
- CLEAN COAL TECHNOLOGY**
 - Executive Order, FutureGen, Council Members
- TEXAS ENERGY PLANNING COUNCIL**
 - Executive Order, Press Releases, Council Members, Meetings
- KIDS WORLD**
 - Home Sweet Home, School House, Camp RRC, RRC Park, What's The Risk?
- INFORMATION RESOURCES**
 - Oil & Gas Records, Information Pertaining to Leases & Royalties, Request Well Records, Central Records, RRC Library
- RULES & REGULATIONS**
 - Oil & Gas, Gas Utilities & Pipelines, LP-Gas, Mining, Dockets
- IN PRINT**
 - Publications, Forms, Electronic Public
- AGENCY SERVICES**
 - Crude Oil & Natural Gas**
 - Drilling & Production Statistics
 - Forms & Filing Procedures
 - Environmental Protection
 - Proration Schedules
 - Notice to Industry
 - General Information
 - Financial Information**
 - Oil Field Cleanup
 - Dedicated Account
 - Natural Gas Transportation**
 - Natural Gas Complaints
 - Gas Utilities
 - Pipeline Safety
 - Integrity Management Update
 - Propane/LP-Gas**
 - Rebates
 - Training & Certification
 - Licensing
 - Surface Mining & Reclamation**
 - Coal Lignite, Uranium
 - Abandoned Mine Lands Reclamation Program
 - Customer Survey

Go to
Environmental
Protection

Constituents of Concern at Historic Sites

- Lead-based paint
- Pipeline mercury meters
- Cooling water tower use of chromium
- Asbestos pipe insulation
- Historic oil storage pits (Banned in 1938)
- Historic saltwater storage pits (Banned by 1969)

Site Remediation Section

- Organization
- Cleanup Standards
- Cleanup Programs

Site Remediation Section

Staffing Level : 32 full time employees;

- 16 in Austin
- 16 Cleanup Coordinators in the RRC's District Offices
- Funding: Oilfield Cleanup Fund

Site Remediation Section

- Cleanup Programs
 - State Managed Cleanup Program (SF)
 - Operator Cleanup Program (OCP)
 - Voluntary Cleanup Program (VCP)
 - Brownfields Response Program (BRP)



Cleanup Standards

- Cleanup to background
- Statewide Rule 91-Crude oil spills in non-sensitive areas
- Risk-Based Cleanup: e.g. Texas Risk Reduction Program Standards
 - Assuming residential land usage, or
 - Assuming commercial/industrial land usage



Sensitive Areas – Risk Based Cleanup

- Sensitive Sites according to Statewide Rule 91
Any site in proximity to surface water, wildlife refuges, commercial or residential areas. The definition applies to sites where there is shallow groundwater or possible pathways for communication with deeper groundwater or discharges to surface waters.



Crude Oil and Condensate in Sensitive Areas

- Guidance Document:
<http://www.rrc.state.tx.us/divisions/og/key-programs/spillcleanup.html>
- Risk based cleanup - must be protective of soil and groundwater
- Must test for TPH, benzene, toluene, ethylbenzene, and xylenes

The Power of Microbes in Bioremediation



State Managed Cleanup Program

- When Responsible Operator fails or refuses to take action.
- Responsible Operator is bankrupt, unknown or cannot be found.

State Managed Cleanup Program

Types of Activities:

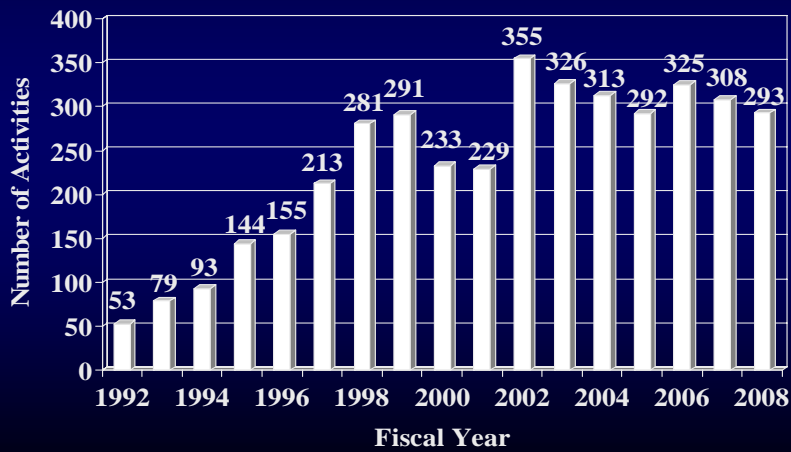
- Emergency
- Routine
- Assessment
- Complex Cleanup Sites



Damage from Hurricane Ike

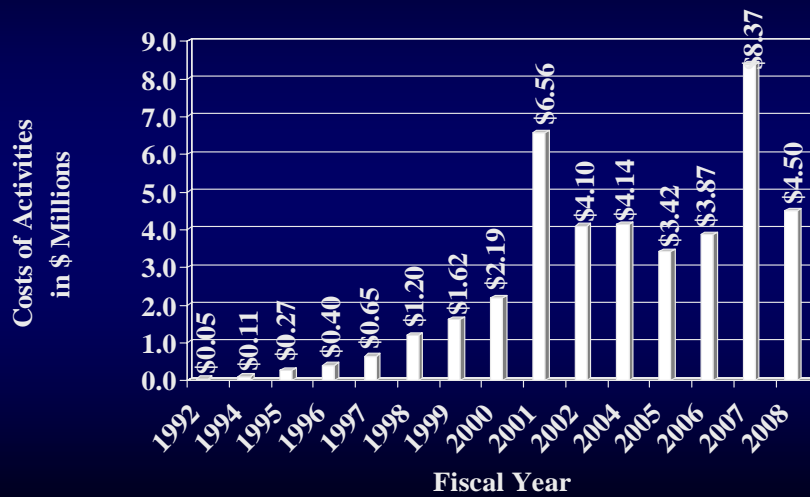
State Managed Site Remediation Program

Completed Cleanup Activities for Fiscal Years 1992 - 2008



State Managed Site Remediation Program

Completed Cleanup Activities Costs for Fiscal Years 1992 - 2008



Site Remediation Cleanups by Cost Category FY 2008

# of Sites	Percentage*	Cost Category
9	50%	\$100,000 plus
23	24%	\$25,000 to \$100,000
34	12%	\$10,000 to \$25,000
227	14%	Less than \$10,000
Total sites 293	100%	

* Percent of total funds spent

Operator Cleanup Program

- Operators report spills to the District Office
- Routine operator cleanups (e.g., Crude oil released to a non-sensitive area) oversight by District Office
- Complex operator cleanups (e.g., Sensitive Areas, Groundwater Impact) forwarded to Site Remediation Section in Austin for oversight
- 550 active sites

Operator Cleanup Program

- Site Remediation Staff oversee operator complex contamination cleanups
- Review assessment reports to ensure that remediation activities are appropriate
- Cleanup objectives must comply with requirements of RRC rules



Voluntary Cleanup Program

- Supports redevelopment of former oil and gas sites
- Applicants **cannot** be responsible parties
- Must address all impacted media and all constituents of concern.
- Applicant and RRC agree on a schedule for completion.
- Certificate of Completion running with the land

Voluntary Cleanup Program Grocery Store, Houston

- Soil and Groundwater impacts delineated
- Impacted soils land-spread under future parking lot
- Groundwater treated on-site
- Certificate of completion that limits use of groundwater on a portion of the site

Voluntary Cleanup Program Grocery Store, Houston



Voluntary Cleanup Program Residential Developments

- **Sugar Land Ranch**- 790 acre Sugar Land Oil Field in Fort Bend County. Site consists of former oil wells, meter stations, and transportation pipelines.

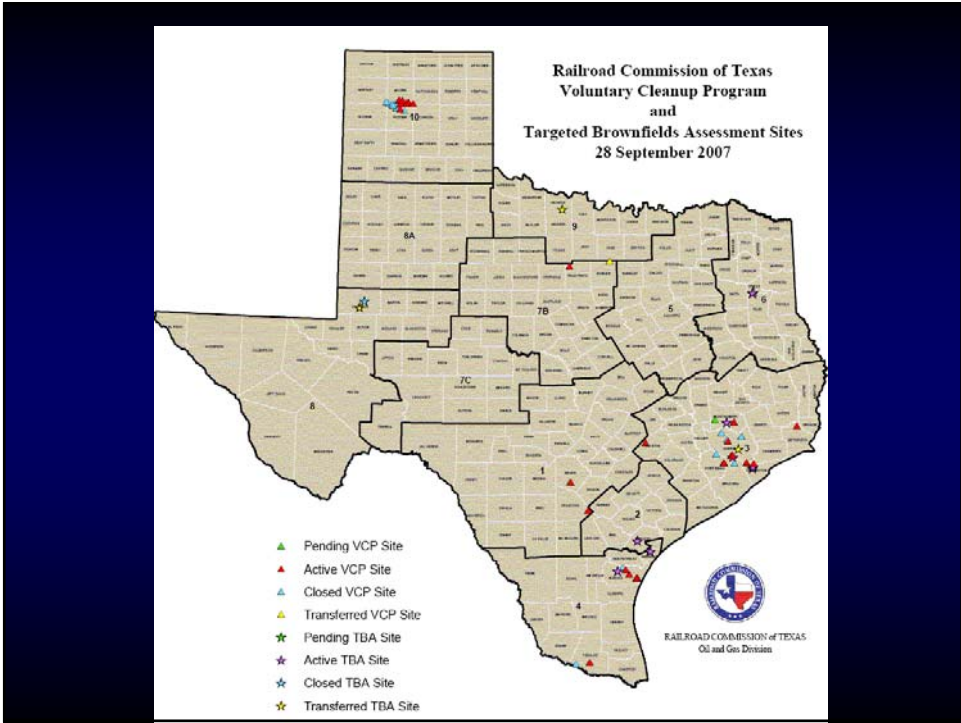


Former well & pits sites
Low Contaminant levels

RRC Brownfields Program

- Funded by The U.S. Environmental Protection Agency
- Offer free Assessments and Cleanup to local governments, non-profits, schools, churches
- In some cases, provide cleanup using state funds or other sources of funding
- Brownfields Certificate of Completion

Helping local communities!



View Cleanup Sites Online

To view certificate click on the date

30003	VCP	Harris	5.624 acre tract off of Boudreaux Rd, Tomball	6	30.059	95.598	Closed	Residential, unrestricted	15-Dec-03
30004	VCP	Harris	Intersection Fannin St & Holmes Rd/610 Business Park, Houston	25	29.665	95.4044	Closed	Commercial-Industrial, restricted GW	02-May-05
30005	VCP	Fort Bend	Harlem Road & FM 1093 (Westheimer Road), Houston	557	29.7027	95.7194	Closed	Residential, restricted GW	28-Sep-06
30006	VCP	Potter	no street address, Masterson, Texas	1.43	35.5602	101.9712	Closed	Residential, unrestricted	03-Oct-05
30007	VCP	Potter	no street address, Masterson	0.92	35.6183	102.0145	Closed	Residential, unrestricted	03-Oct-05
30008	VCP	Harris	Atascacita & Will Clayton Blvd, Humble	2.7	29.9797	95.2185	Accepted	Commercial-Industrial, restricted GW	12-Jan-07
30009	VCP	Moore	no street address, Masterson	0.92	35.632	102.1262	Closed	Residential, unrestricted	22-Mar-06
30010	VCP	Potter	no street address, Masterson	5.09	35.619	102.0596	Closed	Residential, unrestricted	19-Sep-06
30011	VCP	Potter	no street address	0.51	35.619	101.9926	Accepted	Residential, unrestricted	20-Mar-07
30012	VCP	Hartley	no street address, Masterson	5.74	35.654	102.1773	Accepted	Residential, unrestricted	14-Dec-06



RB Disposal Site- Andrews TX



City of Andrews

- RRC - Assessment and Cleanup!
- City of Andrews removed the tanks, and supplied backfill dirt.
- Site to be developed into a parking area and trailhead for a bird-watching park next door.
- Green space, community development, leveraging

Eco-tourism in Andrews



American Avocet

Compton Docks-Bulk Storage Site, Aransas County

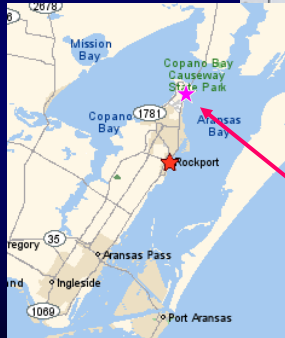


Photo by Roy Staiger

Compton Docks - Benefits

- Landowner has disposed of the waste and dismantled tanks
- Cost savings to state to date is \$250K
- Job creation
- Economic development
- Substantial increase in property taxes

Dickinson School District Sites Galveston County



- Two Proposed school sites located at an historic oil and gas lease.
- Assessments completed. Soil is protective
- Deed restrictions were placed on groundwater
- Sites closed 1-08



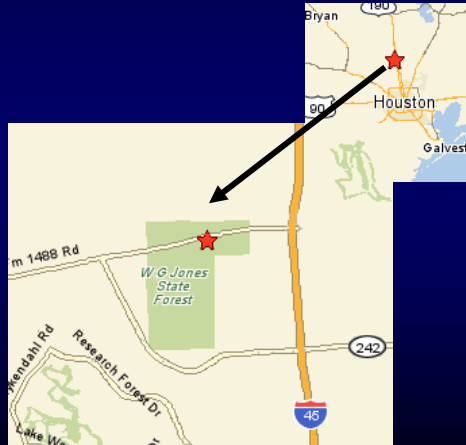
SITE PLAN Dickinson Independent School District

Tract 2

Jones Forest Site, Montgomery County



Red Cockaded Woodpecker



Jones Texas Forest Site Benefits

- Habitat for endangered Red-Cockaded Woodpecker
- RRC performed the assessment with BRP funds
- State funds have been used to plug two wells and perform cleanup
- Assessment and cleanup cost \$246,789

For more information contact:
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Site Remediation Section RRC
512-463-7995

